Self-Management Education

- Diabetes self-management education involves a continuum of services ranging from the teaching of survival skills to comprehensive self-management education programs to intensive management.
- Patients with diabetes must be able to comprehend, analyze, and apply diabetes self-management education, including self-blood glucose monitoring, medical nutrition therapy, and medication administration.
- Educational needs should be assessed at time of diagnosis and whenever there is poor clinical control or a major change in therapy.
- Health literacy and health numeracy play an important role in the health outcomes of patients with diabetes.
- At a minimum, a team consisting of a registered nurse and a registered dietitian, with advanced training and education in diabetes management, should provide patient self-management education.
- The individualized patient assessment and care plan should be documented in the medical record and shared with all members of the inter-disciplinary team.
- Self-management education enables the patient to participate in goal setting to normalize glucose levels and improve health outcomes.
- People with diabetes should increase preparedness by maintaining a waterproof, insulated disaster ready kit which contains items critical to self management, to include glucose testing materials and meter, medications (oral and injectable), syringes, glucose tablets, and glucagon kits.
- As of July 1, 1999, all health insurance carriers in South Dakota, including Medicaid, are required to provide coverage for self-management training and education for individuals with diabetes if prescribed by a health care professional legally authorized to prescribe such items under law.
- In 2006, 66.2 percent of BRFSS respondents with diabetes reported taking a course on how to manage their diabetes. Participation in self-management education classes has increased from 58.7 percent in 2000 to its current level.

What are "survival skills"?

Survival skills should be offered to all persons with diabetes at the time of diagnosis. In order for patients to recognize the significance of diabetes, they should receive a comprehensive self-management education program. Those people unable to attend a comprehensive program should receive instruction in the following key areas:

1. Disease basics
2. Self-monitoring of blood glucose
3. Exercise and activity and weight control
4. Medication use
5. Hypoglycemia/Hyperglycemia
6. Nutrition

Survival skills should be taught by a licensed health care professional with specific training in diabetes and the education of people with diabetes. Specific training must be consistent with the prevailing state standards.

Why is it important for patients with diabetes to be prepared in the event of a natural or man-made disaster?

The 2007 ADA Standards encourage patients with diabetes to increase their preparedness by maintaining a "to go" kit in a waterproof, insulated bag. The bag should contain supplies essential to maintain glycemic control in a disaster situation, including blood glucose meter and testing strips, lancets, container for sharps disposal, oral medications, insulin, syringes, alcohol preps, glucose tablets, and glucagon kits.

Photocopies of relevant health information, medication lists, recent lab tests and procedures, and contact information of health care providers should be included. Prescription numbers should be noted, as pharmacy chains throughout the country may be able to refill medications based on the number alone in the event of relocation. Disaster kits should be checked and replenished at least twice yearly.

What is a comprehensive self-management education program?

A comprehensive self-management education program is an interactive, collaborative, ongoing process involving the person with diabetes and the educator(s). This process includes assessment of the individual's specific education needs, identification of the individual's personal goals, education, and behavioral interventions directed toward helping the individual achieve their goals. The National Standards for Diabetes Self-Management Education identify ten core educational content areas. Assessed needs of the individual will determine which areas listed below are delivered.

1. Describing the diabetes disease process and treatment options
2. Incorporating appropriate nutritional management
3. Incorporating physical activity into lifestyle
4. Utilizing medications (if applicable) for therapeutic effectiveness
5. Monitoring blood glucose, urine ketones (when appropriate), and using the results to improve control
6. Preventing, detecting, and treating acute complications (i.e. periodontal, nephropathy, etc.)
7. Preventing (through risk reduction behavior), detecting, and treating chronic complications
8. Goal setting to promote health and problem solving for daily living
9. Integrating psychosocial adjustment to daily life
10. Promoting preconception care, management during pregnancy, and gestational diabetes management (if applicable)

What are the requirements for comprehensive self-management program coordinators and program instructors?

A program coordinator who has familiarity with the lifelong process of managing a chronic disease (i.e. diabetes) and who is responsible for program planning, implementation, and evaluation shall be designated to manage the program. The coordinator role is filled by a healthcare professional with advanced education on a combination of diabetes management, educational strategies, behavioral interventions, and counseling skills in accordance with program requirements of the American Diabetes Association, the Indian Health Service, or the SD Department of Health. Requirements among these programs vary but are based on the National Standards for Diabetes Self-Management Education.

Program instructors must be licensed health care professionals with recent didactic and experiential preparation in diabetes education and management. DSME instructors who are collectively qualified to teach the required content areas must consist of at least a registered nurse and a registered dietitian/licensed nutritionist. Instructors must either be a CDE or have completed initial diabetes education and training as outlined in accordance with program requirements of the American Diabetes Association, the Indian Health Service, or the SD Department of Health.

All comprehensive program staff must obtain at least 6 hours of continuing education related to diabetes yearly. A list of comprehensive self-management education program recognized by the SD Department of Health, the American Diabetes Association and the Indian Health Service as meeting the national standards is at http://doh.sd.gov/Diabetes/SDDERP.aspx.

What is health literacy?

Health literacy is a person's ability to read, understand, and use health information to make appropriate health care decisions and follow instructions for treatment.

According to the National Adult Literacy surveys conducted in 1993 and 2003, approximately 21 percent of American adults (40 to 44 million) are functionally illiterate and read at or below a 5th grade level and an additional 25 percent are marginally illiterate.

This is reflected in the 90 million adults who have difficulty understanding and using health information. Patients with lower health literacy levels are less apt to seek out preventive health care and to have a medical home. They are more apt to have increased use of emergency room services and have higher rates of hospitalization. They have more difficulty carrying out medical tests and treatment regimes. Reading and comprehending consent forms, insurance forms, or written instructions regarding their treatment plan may be beyond their reach.

How should health literacy be assessed?

Every patient should have a health literacy assessment done on admission to any healthcare center or comprehensive self-management education program. A tool that is free of charge and readily accessible is entitled "The Newest Vital Sign" and is available at http://www.newestvitalsign.org/nvs-resources.aspx. It can be administered in a three-minute period and will give the health care provider an estimate of the patient's health literacy level. Information regarding health literacy level concerns should be communicated to other inter-disciplinary team members to ensure continuity of care.

Why is it necessary to assess cultural beliefs?

It is important to assess a patient's cultural beliefs as these beliefs may influence the manner in which the patient interprets and follows through with the treatment plan. There must be a mutual understanding between healthcare provider and patient that allows the patient to proceed with the plan from his/her own cultural reference.

What interventions can health care providers and educators implement to improve patient's understanding?

According to the Clear Health Communication Initiative, there are six steps that can be used to improve patients' understanding:

1. Limit the amount of information provided at each visit
2. Slow down
3. Use "living room" language, avoid medical jargon
4. Use pictures or models to explain important concepts
5. Assure understanding with the "show me" technique
6. Encourage patients to ask questions

Diabetes educators have been using the "show me" or "teach back" method for many years. It is the one way that an educator has to ensure that the patient can simultaneously describe and demonstrate the steps to a procedure such as insulin withdrawal and injection. However, educators must be careful to use pictures that demonstrate the steps to injection, or if written directions are given as take home reminders, they should be written at a 5th or 6th grade reading level. Readability calculators are available online that can be used to assess the reading level of printed materials to ensure they are at a level the patient can understand. (Available at http://www/harrymclaughlin.com/SMOG.htm.)

The health care provider must be extremely careful to be non-judgmental and avoid placing blame on the patient for not comprehending instructions. The health care provider can communicate ownership of ensuring that the patient understands by stating, "Just to be sure that I have taught you all you need to know, could you repeat back to me the instructions I have given you?"

How frequently should educational needs be assessed?

Educational needs should be assessed at the time of diagnosis and subsequently reassessed at least annually. Reassessment of educational needs should also occur whenever there is poor clinical control or a major change in therapy.

What is a comprehensive educational assessment?

Diabetes is a complex disease that affects nearly every aspect of a person's life. A comprehensive assessment of a person's educational needs is likewise complex. The American Association of Diabetes Educators has identified the following 12 components of a comprehensive educational assessment:

1. Health history
2. Medical history
3. Previous use of medication
4. Diet history
5. Current mental health status
6. Family and social supports
7. Previous diabetes education, actual knowledge, and skills
8. Current self-care management practices
9. Use of healthcare delivery systems
10. Lifestyle practices

11. Physical and psychosocial factors
12. Factors that influence learning

A team consisting of a registered dietitian and a registered nurse should conduct the initial assessment and all reassessments. Both dietitian and nurse should be Certified Diabetes Educators (CDEs) or licensed health care professionals with specific training in diabetes and the education of people with diabetes.

What is intensive management education?

Intensive management education may be either individual or special group sessions designed for patients who are initiating continuous subcutaneous insulin infusion or multiple daily injection therapy combined with carbohydrate counting. A diabetes treatment team familiar with the use of the insulin pump and intensive management coordinates these sessions. This planned education is an integral component of care.

Who is a Certified Diabetes Educator (CDE)?

A Certified Diabetes Educator is a health care professional who is qualified by the National Certification Board for Diabetes Educators to teach people with diabetes how to manage their condition. To achieve certification, the individual must have accrued 1,000 hours in direct diabetes education and passed the certification exam of the National Certification Board for Diabetes Educators.

What is Board Certified – Advanced Diabetes Management (BC-ADM)?

According to the AADE, the Advanced Practitioner in Diabetes Management has an advanced degree and is able to:

- perform complete and/or focused assessments,
- recognize and prioritize complex data in order to identify needs of patients with diabetes across the life span; and
- provide therapeutic problem solving, counseling, and regimen adjustments

The scope of advanced clinical practice includes management skills such as medication adjustment, medical nutrition therapy, exercise planning, counseling for behavior management, and psychosocial issues. Attaining optimal metabolic control may include treatment and monitoring of acute and chronic complications. The depth of knowledge and competence in advanced clinical practice and diabetes skills affords an increased complexity of decision-making, which expands the traditional discipline specific practice. Research, publications, mentoring, and continuing professional development are expected skill sets.

What is the differentiation between CDE and BC-ADM?

BC-ADM certification differs from the CDE in that it is focused on advanced management of clinical diabetes problems and requires an advanced degree before sitting for the examination. A diabetes care professional with a BC-ADM credential may or may not be a CDE (a certification in diabetes education is not a pre-requisite). As diabetes education is an integral part of diabetes care and management, the professional with the BC-ADM credential necessarily incorporates aspects of diabetes self-management training (DSMT) into his or her practice, either directly or through referral to another qualified diabetes educator (AADE, 2008) .

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